## AT15-13 TowCam#3- Seafloor Geology & Biology/ P 26 Nov 2006 (GMT)

## TIME (GMT) Brief Shipboard Observations

- 5:09:32 First clear seafloor image, lobate lava
- 5:13:32 Broken up lava
- 5:15:17 Collapse area
- 5:15:47 Lobate lava
- 5:18:32 Collapse area
- 5:18:47 Lobate lava
- 5:26:32 Hackly lava
- 5:27:32 Lobate lava
- 5:30:47 Hackly lava
- 5:34:32 Lobate lava
- 5:45:47 Collapse area
- 5:47:17 Hackly lava
- 5:47:47 Lobate lava
- 6:03:02 Small collapses through lobate lava
- 6:06:02 End of small collapses
- 6:08:47 Start of area of collapsed lobate lava, fuzzy appearance to edges; ?corres
- 6:20:17 Very rubbly lava
- 6:23:02 Area of large collapses through lobate lava
- 6:29:17 Large anemone at far left of image
- 6:36:32 Orange staining on lobate lava
- 6:36:48 Extinct sulphide chimney complex surrounded by lobate lava. GOOD IMA
- 6:39:33 Collapses in lobate lava
- 6:45:02 Start of hackly lava
- 6:46:17 Back to lobate lava collapses
- 6:49:48 Lobate lava over hackly lava
- 6:51:18 Collapses in lobate lava
- 6:52:33 Hackly lava
- 6:53:03 Start of sheet flow
- 6:54:33 Lobate lava over sheet flow. GOOD IMAGE
- 6:55:53 Hackly lava
- 6:56:18 Lobate lava over sheet flow
- 6:57:03 Small sheet flow
- 6:57:48 Lobate lava
- 6:59:33 Collapses in lobate lava
- 7:08:18 Big collapses
- 7:10:33 Orange stained lava in small collapse pit
- 7:14:33 Some microbial mats
- 7:20:18 Mostly collapsed lava rubble
- 7:26:48 Edge of trough
- 7:32:48 Big lava pillar. GOOD IMAGE
- 7:35:48 Running along trough floor with lots of lava pillars
- 7:45:03 Orange staining in trough floor
- 7:46:03 More orange staining
- 7:48:03 Orange stained lava

- 7:49:18 Orange stained lava pillar
- 7:51:33 Small lobate
- 7:52:03 Lava rubble again
- 7:53:18 Collapses in lobate lava
- 7:57:03 Orange staining in hackly lava
- 7:57:33 Lobate lava
- 7:59:18 Edge of trough
- 7:59:33 Swimming octopus. GOOD IMAGE
- 8:03:03 Lobate lava
- 8:05:48 Orange stained rubbly lava
- 8:09:18 Some microbial mats
- 8:13:48 Some microbial mats and crabs
- 8:15:33 Lava pillars
- 8:18:33 Big lava pillar. GOOD IMAGE
- 8:20:18 Octopus on lava rubble
- 8:24:48 Edge of sheet flow
- 8:25:33 Back to lava rubble
- 8:31:03 Start of extensive diffuse flow area with microbial mats in cracks, galathe
- 8:34:33 Very fuzzy lava
- 8:35:33 End of diffuse flow area
- 8:37:33 Orange stained rubbly lava
- 8:40:03 Lobate lava
- 8:41:03 Diffuse flow to bottom left
- 8:41:33 Lava rubble
- 8:44:48 Edge of trough
- 8:46:03 Orange stained rubbly lava
- 8:47:48 Start of smoker chimney complex
- 8:48:18 Smoker chimney complex, alvinella on chimneys, brachyurans. GOOD IM
- 8:49:03 End of chimney complex
- 8:50:03 Younger lava around older lava pillars. GOOD IMAGE
- 8:51:03 Hackly lava, N-S running fracture to right
- 8:53:18 Fracture now on left
- 8:54:48 End of fractures
- 8:58:03 More fractures
- 9:03:48 Empty mussel shells on hackly lava surface
- 9:04:18 Hackly lava with dead mussel shells lapping older fractured lava. GOOD I
- 9:05:03 End of dead mussel field
- 9:08:03 Edge of trough
- 9:12:23 Orange staining in hackly lava
- 9:14:48 Fracture at edge of trough
- 9:17:18 Hackly lava
- 9:20:18 Fuzzy lava to right
- 9:22:48 Sheet flow
- 9:26:33 Lava rubble
- 9:28:18 Orange stained rubbly lava
- 9:31:03 Start of diffuse flow area with fuzzy lava, microbial mats in cracks, galath
- 9:31:33 Octopus bottom left
- 9:31:48 End of diffuse flow area
- 9:32:33 Lobate lava over hackly lava

- 9:32:48 Lobate lava
- 9:35:33 Fuzzy lava rubble
- 9:37:18 Small sheet flow
- 9:37:33 Live serpulids on fractured sheet flow
- 9:39:03 Edge of trough, lava pillars
- 9:40:48 Big lava pillar, crab and seapen. GOOD IMAGE
- 9:43:18 Start of mussel bed on right, serpulids and barnacles on sticking up rock.
- 9:44:18 End of mussel bed
- 9:44:33 Lava pillars
- 9:45:18 Big lava pillar
- 9:46:33 Start of another mussel bed, lots of dead shells, ?clams, galatheids
- 9:47:33 End of mussel bed, serpulids on rock
- 9:49:03 Start of another mussel bed, lots of dead shells, ?clams, galatheids, serp
- 9:50:03 End of mussel bed
- 9:50:48 Big collapses in lobate lava
- 9:52:18 Edge of trough
- 9:54:03 Fuzzy lava on edge of trough
- 9:58:33 Small extinct sulphide, brachyurans and galatheids. GOOD IMAGE
- 9:58:48 Extensive collapse
- 9:59:33 Edge of trough
- 10:01:03 Edge of trough to left
- 10:03:03 Start of area of collapses in lobate lava, sheet flow visible underneath. Go
- 10:05:18 Lobate lava
- 10:07:18 Collapses in lobate lava
- 10:17:03 Orange staining on lobate lava
- 10:22:33 Rubbly lava
- 10:26:03 Start of extensive sheet flow area
- 10:28:48 Bathysaurus fish
- 10:32:03 Swirls in sheet flow, octopus in left on. GOOD IMAGE
- 10:36:48 Hackly lava
- 10:37:18 Start of diffuse flow area with fuzzy lava, microbial mats in cracks, galath
- 10:39:03 Fuzzy lava rubble
- 10:40:33 End of diffuse flow area
- 10:41:03 Sheet flows
- 10:41:48 Orange stained rubbly lava
- 10:45:18 Small diffuse flow area, fuzzy rocks, galatheids
  - 10:52 Fractured sheet flows
- 10:54:48 Orange stained lava
- 10:56:48 Hackly lava
- 11:00:48 Orange stained lava
- 11:08:03 Last image of hackly lava

sponds to Towcam small temp raise

GΕ



. GOOD IMAGE
ulids, barnacles, ?Riftia tubes. GOOD IMAGE
OOD IMAGE
neids; ?corresponds to Towcam 0.05 degree temp anomaly